

## REMARKS

Claims 1 to 5, 7, 8, 10 to 16 and 18 to 42 were previously pending in this application. Claims 33 to 37 had previously been withdrawn from consideration. Claims 6, 9 and 17 had previously been canceled. Claims 26 to 32 and 38 to 42 had previously been allowed. In the Office Action of February 19, 2002, Claims 16, 18 to 32 and 38 to 42 were allowed. Claims 1 to 5, 7, 8, 10 and 13 to 15 were rejected under 35 U.S.C. §103(a) as being obvious in view of U.S. Patent No. 4,786,888 to Yoneda et al. ("*Yoneda*") and either Japanese application JP 9-69416 to Nihara et al. ("*Nihara*") or U.S. Patent No. 6,023,403 to McGuire et al. ("*McGuire*"). Claims 11 and 12 were objected to but would otherwise be allowable if rewritten to include the limitations of any referenced base claims.

Claim 1 has been amended to more clearly define the present invention over the art of record. Claims 2, 3, 11 and 13 have been amended merely to conform to new language of amended Claim 1 and not for any substantive reason relating to patentability under 35 U.S.C. §§ 101, 102, 103 or 112.

Claim 1 as amended is directed to a surface-mountable electrical circuit protection device that includes a first electrically insulative supporting substrate including an electrode disposed on a first surface thereof. The device includes a second electrically insulative supporting substrate including an electrode disposed on a first surface thereof. First and second PTC elements separated from one another are provided. Each PTC element includes a polymer having conductive particles dispersed therein. The PTC elements are each positioned adjacent to one of the first and second supporting substrates and are formed to contact a portion of the first surface of one of substrates and at least a portion of the electrode disposed thereon. A first electrically conductive end termination wraps around a first end of the PTC elements and electrically contacts the electrode disposed on the first substrate. A second electrically conductive end termination wraps around a second end of the PTC elements and electrically contacts the electrode disposed on the second substrate.

The art of record does not teach the elements of Claim 1 as amended. For example, the art of record does not teach placing two separate PTC elements adjacent to two insulative substrates. For at least this reason, Claim 1 as amended and Claims 2 to 5, 7, 8, and 10 to 15 that directly or indirectly depend therefrom are patentably distinguished over the art of record and are in condition for allowance.

An earnest endeavor has therefore been made to place this application in condition for formal allowance, which is courteously solicited. If the Examiner has any questions regarding the above amendment, Applicants respectfully request that the Examiner contact the Applicants' attorney, Robert Connors, at (312) 807-4214 to discuss the amendment.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "**Versions with Markings to Show Changes Made.**"

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

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In the Claims:

Claim 1 has been amended as follows:

1. (Three Times Amended) A surface-mountable electrical circuit protection device comprising:

a first electrically insulative supporting substrate ~~having a first end and a second end and only one~~ including an electrode disposed on a first surface thereof, ~~the electrode extending to the first end of the first substrate but not the second end of the first substrate;~~

a second electrically insulative supporting substrate ~~having a first end and a second end and only one~~ including an electrode disposed on a first surface thereof, ~~the electrode extending to the second end of the second substrate but not the first end of the second substrate;~~

first and second a PTC element having a first end and a second end and a first surface and a second surface running therebetween, the PTC element comprised of elements separated from one another, each PTC element including a polymer having conductive particles dispersed therein, the PTC element elements each positioned between adjacent to one of the first and second supporting substrates and electrically connected to the electrodes formed to contact a portion of the first surface of one of substrates and at least a portion of the electrode disposed thereon;

~~the electrode disposed on the first surface of the first supporting substrate is also disposed on the first surface of the PTC element and is the only electrode disposed on the first surface of the PTC element, and extends to the first end of the PTC element but not the second end of the PTC element, the electrode disposed on the first surface of the second supporting substrate is also disposed on the second surface of the PTC element and is the only electrode disposed on the second surface of the PTC element, and extends to the second end of the PTC element but not the first end of the PTC element;~~

a first electrically conductive end termination wrapping around ~~the~~ a first end of the PTC ~~element~~ elements and electrically contacting the electrode disposed on the first substrate; and

a second electrically conductive end termination wrapping around ~~the~~ a second end of the PTC ~~element~~ elements and electrically contacting the electrode disposed on the second substrate.

Claim 2 has been amended as follows:

2. (Amended) The device of Claim 1, wherein the first electrically conductive end termination is disposed on the first and second supporting substrates and the first end of the PTC ~~element~~ elements.

Claim 3 has been amended as follows:

3. (Amended) The device of Claim 1, wherein the second electrically conductive end termination is disposed on the first and second supporting substrates and the second end of the PTC ~~element~~ elements.

Claim 11 has been amended as follows:

11. (Amended) The device of Claim 1, further comprising:  
a third supporting substrate having an electrode disposed on a first surface thereof;  
the second supporting substrate having a second electrode disposed on a second surface thereof; and  
~~a second PTC element comprised of a polymer having conductive particles dispersed therein,~~ the second PTC element positioned between the electrode disposed on the first surface of the third supporting substrate and the second electrode disposed on the second surface of the second supporting substrate.

Claim 13 has been amended as follows:

13. (Amended) The device of Claim 1, wherein when the device is electrically connected to a circuit having an electrical current flowing therethrough, the electrical current flows from the first electrically conductive end termination to the electrode disposed on the first surface of the first supporting substrate, through at least one of the PTC ~~element~~ elements to the electrode disposed on the first surface of the second supporting substrate, to the second electrically conductive end termination.